SF

951

.S93

Author

Title

Imprint

THE
EVERY-DAY
TREATMENT OF THE HORSE;

BREEDING, REARING, BREAKING;

WITH

PRACTICAL INFORMATION

ON FEEDING;

WITH THE BEST ADVICE REGARDING FIELD AND STABLE TREATMENT
AS A PROTECTION AGAINST DISEASE.

BY

DR. GEO. STUART, V. S., M. R. C. V. S.,

AUTHOR OF THE "EVERY-DAY TREATMENT OF THE COW," "HOG CHOLERA,"
"TYPHOID FEVER," "TRICHINA," ETC., ETC.

CLEVELAND, O.:

J. B. SAVAGE, PRINTER, 65 & 67 FRANKFORT ST.
1879.

THE
EVERY-DAY
TREATMENT OF THE HORSE;

BREEDING, REARING, BREAKING;

WITH

PRACTICAL INFORMATION

ON FEEDING;

15.18
WITH THE BEST ADVICE REGARDING FIELD AND STABLE TREATMENT
AS A PROTECTION AGAINST DISEASE.

BY

DR. GEO. STUART, V. S., M. R. C. V. S.,

AUTHOR OF THE "EVERY-DAY TREATMENT OF THE COW," "HOG CHOLERA,"
"TYPHOID FEVER," "TRICHINA," ETC., ETC.

CLEVELAND, O.:

J. B. SAVAGE, PRINTER, 65 & 67 FRANKFORT ST.
1879.

π

SF951
S93

31

PREFACE.

In introducing this work before the public, the author, after having a life-long experience in both hemispheres of the globe, is enabled by practice and experience to give the best advice as regards the best management of the Horse in every-day life, in whatever capacity the services of the Horse are required. It is a well known fact that no animal in a domestic state is so much under the control of man as is the Horse. Unless at pasture, all the liberty he has is only the length of the halter. When at work, he is in the hands of his master, guided at his will by the reins, to go at pleasure, to stop at pleasure; he eats at pleasure, drinks at pleasure, and, therefore, his value to the world is greater than that of any other of our domestic animals. When kindly treated he loves to please, and strives in his every endeavor to fulfill to the utmost the task imposed upon him. He is easily educated, easily trained, and whether kept for pleasure or hard work, he goes through his daily avocation with pride and pleasure, the faithful slave of man; therefore, every lover of the Horse will have an opportunity, by studying the following pages, to enable him to keep, feed, and manage the Horse, in health and sickness; in colthood and old age.

The author's object in presenting this work is, to be brief, to give the reader correct ideas of the nature and treatment of the Horse in health and sickness, whether the result of climatic causes, overwork, lameness or injury. He has studied and treated the various ills the Horse is heir to in both the northern and southern climates of the globe, and is fully able to prescribe and advise in health and disease. The modern practice and experience of thirty-five years will be given in these pages, with a view to enable agriculturists, horse owners and attendants to treat lameness and disease, with full directions to define the difference of disease, whatever organ may be affected, how lameness is defined, with full directions how to make up the best prescription and give it to the Horse.

No bleeding or purging, no depletion, or medicinal disease will be advocated, as the days of such barbaric treatment are gone by. Science, in the treatment of disease by medicine, has discovered the most successful means of restoration to health.

It is not the intention of this work to preach up obnoxious horse medicine, with a view to make a well horse sick, but quite the reverse, as will be seen by the careful perusal of the following pages. Health is not wrapped up in drugs and physic balls, but in the strict system of hygiene. When a horse becomes sick, from whatever cause, a correct rule is laid down whereby the owner or attendant will be enabled to define the result, and adopt proper modes of action for the recovery of health.

Should credit follow the labors of the author in the advocacy of man's most faithful animal, the Horse, he declines to accept it; but should the enclosed pages be the means of relieving the Horse from pain and suffering, then the end is accomplished, which is the earnest wish of

Yours, very sincerely,

DR. GEORGE STUART, V. S.

TREATMENT OF THE HORSE.

BREEDING COLTS,

FOR PROFIT OR PLEASURE, FOR ROAD OR DRAUGHT PURPOSES.

The mare should be of perfect form, free of blemish or any chronic disease, and in the experience of stock breeders, should have a deep chest, well-set withers, arch neck, small head, wide loins, and be free of spavin or ringbone, or any hereditary disease likely to impart to their offspring; the horse chosen at the discretion of the breeder, and no animal whatever allowed to be kept for stock purposes, with any defect of lung or limb. In preparing the mare for the reception of the horse, if she has been strictly fed on grain and hay, give her grain or vegetable diet until the bowels are relaxed and her blood cooled; and when she comes in heat, do not excite her either by fast or hard work; keep her in the stable with little food in the evening—no breakfast; take her out to be teased by the horse—serve quietly—return to the stable—foment the pelvis with sponge and cold water—give a drink—feed sparingly and keep in the stable for four or five hours to relieve the excitement, and in ninety-nine cases of every hundred, your mare is in colt. It is against the law of nature to take a mare out of the plough or wagon to be served by the horse in a heated condi-

tion; it cannot reasonably be expected she can be in a fit state for conception, and in a great many cases she is barren for the season. Never serve a mare on a full stomach; never serve a mare in a state of perspiration; never put a mare to work for ten hours after service, in order to prevent abnormal or malformation in foetal life.

I would advise all stock breeders to put the mare to the horse in the month of October, in preference to the spring. In the fall of the year the work is over, the mare will have more rest, and as they naturally become logy or lazy, these propensities can be encouraged. In September of the following year she will foal; the colt will have the benefit of being continually beside the dam, (and will soon eat grain and hay, become strong boned, and in May, when grass is plenty, will be weaned and grow well; when his teeth show one year old he is sixteen months,) as her services are not so much wanted as in the summer months. During the time of gestation see that the mare has a reasonable allowance of grain, as success in breeding depends greatly on the way the mare is kept and fed during pregnancy; oats for bone, and nutritious food for muscular development in the colt. I prefer the mare to be kept at her daily work up to a short time before colting, but used with prudence and care, and as there are a variety of cautionary points to be guarded against, in order to prevent abortion (or slinking), do not allow a mare to smell blood, or come near the placenta of a cow, or the carcass of an animal in a state of decay, as all such contact is liable to cause abortion in the mare, while none other of our domestic animals are so sensitive to smell. Should the mare be confined in the stable, take her out and exercise her in the hand; do not allow her to roll, as the action of rolling will kill the foetus, and symptoms will appear, such as flat sides, the mammillary gland will become swollen and she will give milk, and in some cases it will drop from the teats—a sure sign of a dead colt. At the time of colting feed

sparingly of nutritious food, see that the bowels are not constipated, as over-feeding will bring on parturient or milk-fever, much to be dreaded, as it is difficult to treat successfully, and in many a case before a veterinary surgeon can be got your mare is dead. A trotting mare should be kept regularly at her work when in colt, if a trotting colt is wanted; a work mare should be worked up till a day or so of her colting, and a saddle mare the same; a proven rule to breed with certainty the kind of stock wanted—and the mare should see the horse she has been served with, in order to impress his image and color upon the offspring.

SIGNS OF PREGNANCY.

It is very difficult to decide, for certainty, for three months after services, as to the mare being in colt. No better judge than the party best acquainted with the temper of the mare. When offered the embrace of the horse ten days after the first service, even should she refuse it, is no sure sign of pregnancy, as I have seen cases where the mare proved to be in colt, and took the horse as free as the first time. The mammillary glands begin to enlarge at four months, at six the foetus will show life by giving the mare a drink of cold water; stand behind her and on the right side, a rolling action will be observed. Near the time of colting the mare should be kept in a roomy loose box, with no obstructions in her way, and well bedded with straw, so that, as she may colt in a standing position, the colt will not be injured in parturition. A few days previous to colting a brown colored gum will be seen adhering to the teats, and twenty-four hours before, the sacrum bones will slip, which will be easily felt by drawing the hand down each side of the rump. An attendant should not be far off at the time of colting, as many a colt is lost by being choked with the placenta. The first thing to be done, draw the hand through the mouth, draw off the

placenta, sprinkle the colt over with a mixture of oatmeal and salt or middlings and salt, leave the mare alone in quietness till she has licked the colt dry and clean; in an hour or so see that no bleeding has taken place at the navel (umbilical cord), if so, tie a piece of small twine (or ligature) close to the belly and leave your colt to the mare. For the rest, give the mare a warm drink to assist exhaustion, and should she show any symptoms of sickness, milk her for a day or so; give her light mashies three times a day in order to give a good supply of milk for the colt; in one week, if the weather be fine, turn her out to pasture; take her in at night till the weather is warm; do not let them out in cold, wet weather, or even if cold, as cold will put the milk from the mare. At six weeks the colt and mare should have a pint or two of good oats. It often happens that constipation takes place shortly after colting, to prevent this give a fresh egg, broken and put down the colt's throat; but should obstinate constipation be present, relax the bowels; give the colt one-half pound of black molasses and half an ounce of flour of sulphur, two tablespoonfuls of warm water, mix. Do not give oil or lard, as such treatment brings on nausea and sickness. Epsom salts, aloes, and all drastic medicine ought never to be given. Colts that are brought up with cows' milk are more subject to constipation, but to keep the bowels in healthy action, give one pint of new milk and two tablespoonfuls of flax-seed tea, with a little salt and crushed oats, if in winter, but in summer give all the grass the colt wants; crushed oats are good at any season. Colts are the better to be accustomed to be handled and learned to follow with hand or halter, as it makes them easily broken to work. Do not tease or play with them, as it makes them tricky. Take them and lead them around, and let them see all that is going on in order to make them way-wise.

BREAKING COLTS.

Breaking colts requires a person of quiet, kind habits, and endowed with patience. A man given to halloing, cursing and swearing, should never be allowed to take a horse by the head, far less a colt; as such treatment is liable to implant the spirit of fear and dread in the young animal which he never forgets, and is often the cause of many a serious accident. Keep off the whip, use it only with discretion, not without a cause; teach the colt what you wish him to do, then proceed with his education. I do not advise any one to allow the colt to follow the dam while at work, as we often see in our streets accidents happen, and as a blemished colt is of little value and often worthless.

FIRST LESSON.—Lead them with the halter to let them see the traffic on the road. Should they shy or show fear of any object do not whip them, as the next time they see the same object they are worse, as they expect to get the same cruel application of the whip. Rather lead them up to the object, coax and be kind, have a little corn or oats, give a little bite, lay some on the object, and instead of leaping over the fence, risking a broken leg or neck, your colt wants to go up to the object to see if there is any more corn, never again showing fear of any object.

In the stable put an open bridle with an easy bit in the mouth, let him stand for an hour or so at a time; turn him in the stall, caress and pet him as he often gets afraid of the bit; check him up to teach him to keep his head up. After he is accustomed to the bit, then teach him to lead, going in advance of him; stand still, saying whoa, whoa; then go on speaking to him, then repeat from day to day till he knows.

SECOND LESSON.—Put a pair of leather reins on the bridle bit; do not put any harness on, only the surcingle that he had on in the stall; get two assistants, one at each side of the colt, each having hitching straps attached to the rings of the bit; drive him with the reins, saying, “Go on,” or “Go along, Star,” mentioning his name to draw his attention; when rein-ing to the right or left, say, “Get over,” drawing him over to the side wanted; teach him to back by pulling steadily on both reins; do not tug, as he becomes stupid and does not know what is wanted. You will soon be able to drive him steady without any assistants, and will then see if he would kick when put in harness. Accustom him well with harness before putting him in the shafts. Break him single, as he will be sure to go double whenever wanted.

Horses broke double are often balky for want of a companion, or run away through fear; therefore if wanted to work single have to be broken a second time.

THIRD LESSON.—After having got your colt well accustomed to the harness, get two young saplings, 12 feet long, to act as shafts; put them through the saddle straps, as seen in the cut, attach a strap at the end to carry in the hand or over the shoulder. Should he kick or rear you are safe and have a good control over him. After he has been acquainted several times, let the ends drop on the ground, and when you want him to back lift them up, so that your colt is well broke before you put him to buggy or wagon.

FOURTH LESSON.—Having got your colt to understand well what “Whoa,” and “Go along” mean, put him in the shafts of your road sulky, buggy or light wagon, having on the kicking rope, always having an assistant with you to help put him in the shafts; keep his head well up at all times, so that he does not get a chance to kick; and as he will be more liable to kick in unhitching him, let your assistant stand in front of him working the bit from side to side of his mouth, or patting him on the face or nose to attract his attention till the harness is all free of the shafts. Walk him gently into his stall, get him well rubbed down after he has had a little hay to eat to amuse himself. By following the above plan, you will find you have a good, docile animal. If wanted for the saddle you will have little trouble in teaching him to ride easy and well. A colt accustomed to saddle till six or seven years old is always difficult to break to harness, but as the saddle comes so natural to a horse, no fear being dreaded. I have mounted a horse three years old that never had on a saddle before, and he went on about his business as if he had been regularly rode a distance of ten miles a day, while a colt mounted for the first time will often throw himself and rider, and struggle hard to get free.

It is a mistake to work a colt till he is tired or on a long journey for some time after he is broke, as they generally dislike to get the harness on; but take them short drives for awhile at first and they will take to the harness more pleasantly.

AN EASY SEAT ACROSS THE COUNTRY.

BUYING A HORSE.

EXAMINATION OF A HORSE.

I am sorry to say that little confidence is often placed in any individual selling a horse, as the principle of truth and integrity is often at a premium in horse-trading; hence the necessity of a strict examination, as

“Man’s inhumanity to man makes countless thousands mourn.”

The first thing to be done is to see him in his stall; to ascertain whether he is a cribber or wind sucker, give him a handful of oats, and he will prove himself; if a weaver, stand quietly behind him, and you will see him swinging his head from side to side of his stall; if a kicker, you will see the mark of his kicking on the side of his stall; shake the oat measure but do not give him any, and that alone will bring out some of his vices in the stall.

Lead him out of the stall, examine his mouth, nose, eyes, etc., for external defects. If the enamel is worn off his fore teeth, then he is a cribber; if his eyes are of a whitish blue color, he is partially blind or may be given to shying, a very dangerous habit; and whatever purpose the horse is recommended or wanted for, whether for riding, harness, or farm work, get a fair trial. You will then be able to find out some of his vices, (if any). Get a warranty or guarantee with personal security from the party selling, or have him carefully examined by a competent veterinary surgeon. A horse may be sound to-day, but having been idle for some time before sale, he may feel good and overwork himself by fretting, or be caused to work too hard and too long hours, and thereby become sick. Such cases I have known, and the horse returned, and a serious lawsuit be the result. Settle all cases by arbitration, if possible, as the price of a horse goes a short way in law, however good.

FEEDING THE HORSE DURING WINTER.

Horses kept for road purposes, in order to keep free of disease, ought never to be driven fast on a full stomach immediately after being fed, nor allowed to drink as much as they would take after having been driven a mile or two on the road: should the owner have business to stop on the road, give a drink before starting, not at the moment the horse is stopped, even though the horse is not warm; if warm, and the weather cold or damp, do not forget to put on your robe or blanket while standing; guard against standing your horse in a draft. After having been driven fast or a long journey, if your horse is warm, the moment the harness is off him, get a drink of tepid water, with oat or corn meal and a little table salt; should he be so warm as to require the wooden scraper, use it all over him, sponge him over with tepid water, use your linen cloth rubbers well over your horse. If your stable is warm let him stand for half an hour, give him a little hay to amuse him, rub down with the brush, put on your blankets, and your horse will not break out in sweat.

After sleighing and frosty, severe weather or heavy roads, I have always found it safe to pour boiling water over the oats and let them stand an hour or so before feeding, with a little salt to flavor it. Do not give a horse ice-cold water when warm, either in the stable or coming off a drive, or before going into the stable after the day's work is over; as such treatment is sure to founder, or bring on various other diseases. On coming into the stable, after having removed the harness, pick up his feet, pick out the clay, snow or whatever is in the feet, wash out with cold water over the pastern joint; be particular that no stone, nail, piece of glass, wood, gravel or other hard substance is stuck about the frog; dry and clean the fetlock well, and I approve of a flannel bandage rolled on the leg immediately and taken off at your convenience. By doing so you

will never have scratches or even thrush. Cleanliness is next to godliness; it has its own reward. Warm oats with a little salt added, on a cold night, is a grand preventive against chills, and is a safe precaution against the inroad of disease.

Dirt, and standing in manure, is the cause of thrush. After you have got through with your attention to your horse, put him in his stall, spread a little bedding around his hind feet, as it will encourage him to stale. Straw is best for bedding the horse, but sawdust, sand and wood shavings used for bedding are accompanied with many drawbacks, and ought never to be used unless as a point of necessity; if you bed with anything but straw you will require to wash out the sheath every week, as sand and dust will bring on inflammation.

FEEDING HORSES DURING SUMMER.

Horses kept in cities and fed exclusively on oats and hay, are liable to constipation on account of the hay being so dry and musty; as a preventive, give a little fresh grass occasionally, or where it is not convenient, give a mash of scalded oats, middlings, and flax seed (not meal). A good wholesome mash is made thus: take three quarts oats, boiled or scalded for four hours; pour off the water; add two quarts coarse middlings, one tablespoonful of flax seed; add a tablespoonful of salt; mix: or to give an occasional feed of dry middlings with oats, does very well, but in Europe we use boiled barley, which is more rich in albumen than oats. It is a good safe way to sprinkle the hay with salted water before feeding, as an appetizer. All horses eat it with a great relish.

When the horse comes from a drive very warm, scrape off the sweat, sponge over with cold water, use your rubbers, then the brush to smooth the hair; put on a blanket, give a few gluts of cold water, or wash out the mouth with cold water; walk

till dry, then feed, give a liberal drink of water, and you will have no further trouble. Wash and bandage as in winter if required; take off the bandage and rub the leg. Get a sieve to clean your oats before feeding, as there is a great deal of dust among oats in summer. Musty hay is dangerous to feed at any time, as insects, fungoid, and sporals, are death-dealing agents to the horse, resulting in indigestion, heaves, colic, enteritis, etc.

THE DETECTION OF DISEASE.

The attendant is often the first to detect disease. It often happens that the first notice of internal disease is in the following indications: refusal to feed; has not had any passage; no staling; horse more restive than usual, having pawed all his bedding behind him; all over perspiration, heaving at the flanks, standing wide behind, hanging his head, or frothing at the mouth; shivering as if cold, or kicking at his belly, or turning his head and touching his side or any other part affected; restive, rising up and lying down, hair standing out rough, lashing or whisking the tail, or showing impatience not customary to the animal, timidity or fear as the result of internal pain, bowels relaxed, or profuse stooling; and a number of other symptoms observable, but as the attendant has not the means of knowing the cause, immediate advice in all cases ought to be sought; but it often happens that the attendant, of his own will, or by advice of a neighbor, prescribes a remedy in a haphazard way that only excites the disease and threatens death. When the animal is dying, as a last resort a veterinary surgeon is sent for, often too late. How many valuable horses would be saved if the practical saying were acted on, "a stitch in time saves nine;" how many lamentations would be soothed. How often do we hear such sayings as, "I

would rather lose \$500 than my horse had died." Prevent all these annoyances and send for a veterinary surgeon at once; when, depend upon it, his interest is your interest to do his best in arriving at a safe and sure diagnosis or definition of the seat or locality of the disease in order to administer the most active remedy to control the disease and alleviate pain.

FEVER,

Or whatever disorganizes any part of the animal system is called fever. Injudicious treatment of any kind is the means of bringing on fever; such as over-feeding, uncleanness, over-driving, overworking, cold, chills by drinking water in severe frosty weather, exposure to a cold draft or a hot sun, injury,—and goes by various names in a medical point of view, such as sympathetic, local, traumatic, zymotic, epizootic, puerperal, parturient, etc., etc. All have their local effect in the animal system. A fever of blood poisoning is universal, as the circulation carries the cause all over the system, and this is controlled by remedies which will be pointed out as I proceed to take up the different diseases animal life is heir to.

DISEASE IN THE HORSE.

As already stated, I have found from practice that bleeding and purging as a curative of disease, are only adding fuel to fire. Depletion by bleeding has been the scythe in death, mowing down its millions. Thirty years ago it was the practice. Whatever was the matter with the horse, the fleam or lancet was first resorted to, and to crown all, an ounce ball, made up of aloes, croton oil and other compounds, was crammed down the throat. Such treatment would require a constitution

like a smith's anvil. And the indiscriminate use of poisons, boiling oil, tar, and the firing iron applied to raw surfaces or sensitive wounds, are cruel in the extreme. It is neither good nor successful practice to stimulate a diseased organ, but to sooth. It is highly condemnable to try to cure a burn by burning the wound deeper, or to wrench or sprain one leg because the other leg has been lame. With these prefatory remarks we proceed to take up the various diseases.

POLL EVIL

Is caused by injury to the head. The writer has known a case of poll evil in the horse while at pasture, by standing in the shade and striking the limbs of a tree driving off the flies, striking a beam, or being struck over the head with the heavy end of a whip-shank, hanging back in the stall, striking the lower side of the manger. A swelling takes place immediately behind the ears, feels hot, the horse refuses to have the bridle or halter put on, shows symptoms of great pain, and loses flesh very fast, and is afraid of every movement of the reins. In a few weeks the enlargement will break open and discharge a yellow matter, which gives the animal a little relief. No time should be lost in getting a cure accomplished, as the purulent, ulcerating matter will eat its way to the bones of the neck and occiput. As soon as the swelling is observed, foment well with warm water, then open; apply No. 1, iodine, 2 drachms, lard, 6 ounces, as often as possible; the halter should be taken off and a neck-strap used instead; if it is caused by hanging back in the stall, a rope should be placed across the hind part of the horse from pillar to pillar, to prevent him getting back; but a very good plan is to fix a small rope, the thickness of an ordinary clothes-line, from the ring, a little shorter than the halter shank through the ring of the halter, surcingle, and

below the tail. But a better way during treatment, is to put the horse in a box-stall, after the fever heat has subsided. By no means use a poultice, as you will bring on matter. Cold fomentations will do no good. Tinct. of arnica, one part; tinct. opium, two parts, will relieve the pain; but after it has bursted, it will be beyond the management of ordinary skill and should be attended to at once by a practical veterinary.

CANKER OF THE EAR

Is a disease brought on by sand, dust, lime, or sawdust getting into the ear, causing irritation, and by the horse rubbing against the side of his stall. Ulceration is the result. When persons clip the inside hair from the ears of their horses, the dust from the hay-rack gets in, as the natural protection is gone. No such practice should be followed. Canker in the ear is treated thus: Put a twitch on the muzzle of your horse, take a sponge tied on to the end of a piece of stick, make a strong solution of soda, soap and warm water, dry out well with a soft linen cloth, clean all foreign substance well out, then apply the following: Take one ounce of burnt alum, melt in one pint of warm water, add two drachms of carbonate of soda, then apply with the sponge to every sore part. Several times in a day insert a little sweet oil to soothe the part ulcerated, and repeat from day to day till the disease is cured.

STAGGERS

Is caused by pressure of blood upon the brain, occasioned by a disordered stomach, by over exertion immediately after feeding, a gorged stomach, an overfeed after long fasting. Two kinds of staggers are distinctly observed, sleepy and mad. Horses

affected with sleepy staggers look sleepy, languid, and slow of motion, and will sometimes fall down on the road and lie still; if let alone for a short time then all is well; but mad staggers are one of the most dangerous diseases the horse can be affected with. He will become suddenly affected while at work in the field or on the road. They have been known to throw themselves down and in their struggles injure the other horse, and kill themselves on the plough. Horses ought never to be unhitched while in a fit of staggers, as they are more safe and better under control in the harness than free, if a heavy load is behind them; but a horse driven single in a light wagon or buggy is most dangerous of any, as they become uncontrollable, and would as readily go over a precipice as keep the road. A horse affected with staggers ought not to be kept for family use, as it often happens that a horse is kept in the stable for days at a time, and full fed on grain and hay. Such a horse is fit subject to be affected with such a disease. A vile and cruel operation is often practiced when a horse has become affected with the staggers—cutting the bars of the mouth and causing the blood to run freely, thereby causing unnecessary pain to the poor afflicted animal, and doing no good. Take a sponge and cold water, foment the head well for a few minutes, which is a more humane mode of treatment than the above. Begin in the stable if you wish to guard against effects of this kind. See that the bowels are kept natural, feed often, and little at a time, small quantities of water if driving on the road in warm weather, as staggers are more frequent in the horse in hot than cold weather. A fatal termination of this disease ends in phrenitis, or inflammation of the brain; sunstroke is another result, in a great many cases affecting horses dried in the bowels or constipated, as city horses fed exclusively on oats, corn and hay are apt to be.

When staggers affect the horse get him into the shade or a cool shed as soon as possible, lave plenty of cold water on the

head, give a good rest before going into the heat of the sun; drive such a horse only every morning and evening, as heat only aggravates the disease. A law ought to be in force in every country to stop the sale of such a horse, as no one is safe any moment, while driving or riding, beside the risk of life and property within reach of the maddened animal. Do not allow such an animal to get over fat, as high condition tends to affect the animal more often and severely than if in fair working condition. A person knowingly using such a horse in the busy streets of a city, ought to be punished, as such a horse is a moving magazine, liable to explode and sacrifice human life at any moment. Congestion of the brain is the usual condition found in post mortem research after death. Vertigo is a slight attack of staggers, and if properly treated a cure can be effected.

SUNSTROKE.

Sunstroke, or as in French, *coup de soleil*, has much the same appearance in the attack as staggers, but with the practiced eye of experience no mistake can be made. It is the result of over-exertion and exposure to the sun's heat, combined with reflection from the pavement. It is often in the city, seldom in the country; and whenever a horse becomes struck use cold water freely over the head. If traveling in a hot sun water often, feed little and often, see that there is no constipation or dryness of the bowels, as any irregularity of the system aggravates sunstroke. Never bleed, as any depletion is certain death, and renders the case incurable. If a horse is once sunstruck do not use him again that season, as a second seizure is instant death. Only use him morning and evening, as my experience has taught me that a loss of energy is the result.

THE NASAL ORGANS OR NOSTRILS,

Or olfactory nerves, are the seat of smell and the veterinary's sun-dial. The indications of various internal diseases are shadowed on the septum nasi, or inside lining of the nostrils. As diseases of the lungs are depicted as a part of the diagnosis ozena, distemper, fever arising from cold, epizootic, nasal gleet, glanders, etc., etc.

The nostrils in health are clean, clear, pinky red, with no discharge, by which the horse breathes only, direct from the lungs, by which the horse defines all his food, whether in the meadow or the manger; separating and selecting all his food by the muzzle, and choosing only by the sense of smell,—a prominent provision of nature, rejecting poisonous weeds and musty food, which no man can force him to eat. The sense of smell to the horse, with the long hairs or feelers that grow on the muzzle are to him what hands are to men; he measures distance, and in the dark has the power of feeling and smelling for his food, while wild horses can smell an enemy for a long distance off. Pieces of iron, nails, stones, twine and other substances are often found in the feed box, left there by sense of smell or touch. All articles, such as soap, oils, or any ingredient of a repugnant smell should be kept away from the feed box.

DISEASES OF THE EYE.

As a result, shying is a common occurrence in defective vision. No horse that has a good sight will be seen to shy, but all animals of weak vision, that see an object imperfectly, become afraid and will fly to the reverse side. Horses affected in this way should be gently taken up to the object, and in all kindness shown the cause of fear. But when the vision has become impaired by disease, such as ophthalmia or moon blindness, then a cause is seen by the effect of opacity, or a whitish

seum covering the cornea of the eye, the result of injury or accident. At other times a white spot will be seen on the under side of the star. Such a horse cannot see the ground—can only see above the head. Others, again, have a red or blood-shot appearance, caused by cold or exposure. Some stables that are warm inside have ventilators immediately in front of the horse's head, whereby the horses have got cold and resulted in the above condition. All such cases are to be treated with cooling lotions such as recipe No. 1:

Plumbi acid, one ounce; cold spring water, two quarts; mix. Then take a piece of cotton batting, saturate well with the lotion and apply to the eye, keeping wet as much as possible. But should there be much opacity or whiteness, then use instead the following:

Sulphate of zinc, two drachms; cold, spring water, one pint; tinct. opii, two ounces; mix.

Should the infusion, redness or inflammation be predominant, with watery discharges, take a thin cloth, wrap up half a pound of coarse bran, and saturate with the following recipe, then apply in the same manner.

Bol. Armenia, one ounce; acetic acid, one ounce; four quarts of cold water; mix, and apply with a bandage.

THE MOUTH.

The earliest trouble horsemen and breeders find is from teeth-
ing. We have seen a few cases where an outward projection of the incisors had become a very troublesome obstruction in the way of feeding. After the colt is old enough to begin to crop for itself, a difficulty is observed in the cropping and feeding of the colt although he can suck well. As he grows he becomes poor; an examination of the mouth reveals the defect.

The teeth projecting from the mouth is a decided impediment in the way of feeding, and ought to be extracted as soon as observed, as the colt can be sustained by the mother's milk for a few weeks till the gums harden and a new set of teeth will soon grow all right. If left till weaned, then the colt has to be supported on gruel and mash food; when colts are allowed to grow up with the teeth projecting, they become what is called parrot-mouthed. I approve of stinging a colt while drawing teeth, as we are safe not to injure him. If a young colt is thrown or tied down you will run a risk of injuring him internally, as his struggles when lying tied may bring on hernia or injury to the bladder, or blemish his legs for life. Even in the above position do not strap the legs; give them freedom, as with the aid of an assistant to hold the colt around the neck you are drawing the two or four teeth. The mode of operation is to have a pair of large two-winged forceps, draw the nearest tooth first, bending the hand down to the outside of the mouth, nipping between the finger and thumb the lacerated gum. After the teeth are extracted use a solution of tincture of myrrh and water to stop bleeding and assist the healing process; as soon as you are finished let down your colt and he will run away to his dam as if nothing had happened. If cases of parrot mouth were attended to in time, many a defect would be cured and teeth grow natural.

APHTHA IN THE MOUTH.

Many breeders have observed that their colt acted as if sick and could not suck, but on examination of the mouth a brown mucous was adhering to the gums, and sore, ulcerated, red spots on tongue and lips; my belief is it is caused by the heated state of the blood and milk of the dam while in season, as I have watched such cases in Europe and America. No weeds could

do it, as the paddocks were kept as free as a gentleman's lawn. Wash the mouth with a weak astringent, non-poisonous, and in a day or so the colt will be all well. I have seen the sting of the burning nettle of Scotland swell up the mamillary gland of the mare caused by lying down on them and cause a case of garget, but warm fomentations and the use of weak ointment soon repaired the injury; and the bites of ants in America acted the same way.

LAMPAS IN THE COLT

Is an imaginary disease, and is the result of a change in the mouth while teething, and a natural development ; but the ignorant horseman, finding that his colt of three or four years old is off his feed, takes him to the forge to be seen by some smith whose learning has been neglected and whose know-nothing education reveals the fact that the colt has that hobby of a disease called lampas, and must be twitched and gagged, burned in the mouth, or cut with a knife as blunt as their ways are cruel. If ever there was a case that demanded the strictest attention of the Humane Society all over the United States, that is one; and a law cannot be too soon in force to punish such unwarranted indiscrimination and cruelty. There is not a work written by a veterinary surgeon that advocates cutting or burning, as the result has proved disastrous to many a colt, and a heavy loss to the owner. As an illustration : A colt came to my forge in July, 1875, to get the hind shoes on. On coming up to the door no persuasion could get him in, as the sight of the fires and sound of the anvil so frightened him as to almost make him crazy. After a deal of coaxing I recommended him to be brought back the next day and gently dealt with till he could be got inside with another horse ; but he was taken to another forge and forced inside, where there was no noise or commotion

to frighten him ; but so frightened was he at the fire, hot shoe sparks, and sound of the anvil, that whenever the smith attempted to approach him he reared, plunged and did his best to get out. However, a twitch was put on him, and the ropes from shoulder to fetlock of hind leg ; he became quite unmanageable and threw himself down, so injuring the lumbar muscles and bone of the spine that he never could get up, and as a consequence, was shot. So ended the life of a valuable bay Hamiltonian colt, four years old. Now for the solution of the problem: The colt was several times shod forward and stood the operation of shoeing well; but the last of April he had lampas, and was burned behind the fore-teeth as a decided cure. He never forgot the cruel treatment and could not be persuaded to enter a forge. Such was the reward of burning as a cure for lampas in that case. I have one or two similar cases in my mind. In Scotland, I remember of a chestnut horse that had been treated in that way, and every time he had to be shod he had to be thrown ; and the last time he was thrown he never rose again, having ruptured a blood vessel and died. Lampas can be cured in five minutes by a proper application and rubbing the bars back with the thumb from the front teeth. The remedy is so simple and pleasurable to the colt that he will stretch out his neck and keep his mouth open, meanwhile you are rubbing the mouth, and will work on the part with his tongue after you are done, and although he has not been able to enjoy his feed of oats for some days previous, he will eat whatever is given him with sweet relish a few minutes after.

EXCORIATED ANGLES OF THE MOUTH.

In veterinary practice a great many cases come under treatment of excoriation of lips, gums and tongue, caused by careless management and abuse by the bit. We have cases of lips literally lacerated by tugging, sawing and too tight overcheck

or bearing reins. A great many bits used are poor instruments to make a good mouth. The wire bit, the chain bit, and numbers of other instruments of torture have only their place in the stable museum as articles belonging to the Dark Ages. It is true, many a horse cannot be managed without a severe bit. Try the nose-strap rubber bit—rubber covered snaffle—marten bit, and many other easy appliances for the proper management, easy driving and comfort to the horse.

The lips torn, lacerated tongue and gums are a decided drawback in the value of a horse, and in a veterinary examination is as much a case of unsoundness as a broken knee, and goes further than the word blemish.

In stables or barns where the bridle is taken off the horse, the bit being wet and hung to one side where the frost affects it, the next time the bridle is used, the bit put in the horse's mouth without being warmed, will excoriate and severely annoy the horse and prevent him feeding freely for days to come. When a frozen bit is put into a horse's mouth he will run backward out of his stall with the stinging sensation caused by the frosted bit sticking to his mouth. The writer remembers a case in point where a team of horses was engaged in hauling stone out of a quarry. At noon the bridles were taken off and they were fed from the nose-bag. After feeding the bridles were put on, the bits being frozen during the time the horses were feeding; immediately the horses ran back over into the quarry and were both killed.

SPEEDY CUTTING

May be defined in two ways: As interfering and cutting the pastern, and cutting and injuring the cannon and inside of the knee. A high stepping animal may injure the knee whether he has shoes on or not; but it is seldom that a horse will interfere or cut the pastern joint without shoes, unless the hoof becomes

ragged or rough on the inside. Whenever an injury of this kind occurs, get the part cleaned well with carbonate of soda and tepid water; then apply the healing ointment, and it will be well in a few days; then keep on a soft flannel bandage, doubled over the pastern, or a boot of rubber or leather.

Splints are the result of injury to the cannon bone, and an enlargement or swelling, accompanied by heat and fever to the inside of the knee. There are many devices to prevent speedy cutting of the knee : a three-quarter shoe, a feather-edge shoe, and a boot to protect the leg or knee.

THE TEETH

Of the horse ought occasionally to be examined on account of the many accidents they are liable to. A free feeder or a hungry horse is at all times liable to get foreign substances firmly pressed between the teeth or to break the edges of the grinders in consequence of a piece of nail, hard wood, or pebble stone having been snatched up and quickly pressed between the teeth while eating oats.

The teeth of the horse are as sensitive to pain as those of the human being, and few of the cases called by horsemen "out of condition," are attributed to diseased teeth. A horse has gone day after day, and year after year, till death puts an end to his suffering, with toothache caused by carious or rotten teeth, and the thought never struck the owner that his horse was suffering from toothache, and he never once thought of having his mouth examined. I have had young horses brought to me for treatment when nothing was wrong but the teeth; feeding voraciously one meal and slopping all over the feed-box the next; wanting to eat but suffering acute pain, was prevented from eating. On examination I found sometimes a loose tooth, a broken tooth, a

carious or rotten tooth, a molar tooth projecting up against the upper jaw, having been injured and misplaced by injury, supposed to have been kicked.

I immediately had recourse to the forceps, drew or wrenched out the protruding molar, rasped the remaining teeth, drew or pressed the wounded gums together. The poor hungry animal went to eating with a relish it was a pleasure to look at, and in six weeks he became fat, could eat as well as ever. He was poor, emaciated, and his digestive organs were impaired; he passed his oats as he ate them. I fed him on scalded middlings, boiled rice and oat meal, and every day he improved in flesh and got a skin on him like glass. I would advise boiled carrots, Swedish turnips, boiled barley, boiled or scalded oats and rice, and do not forget to put salt to flavor. I have never seen a horse but became very fond of them and did well. Any old horse whose digestive organs are weakened will become a beauty if fed in that way, with a sufficient quantity of hay. Horses kept in the city for family use if kept in that way can be kept cheap, and not look so dry, shaggy and long haired. If their work consists of a drive to the office, or to market, a few family calls on a fine day, or to church on the Sabbath, and if wet or too cold never out of the warm stable, that is the kind of treatment for such a pet. If his work requires oats oftener than two times a day, give the warm mash in the evening. Your horse will feel well, look gay, be easily cleaned, a soft skin and clear hair, a silky tail and mane, with neither scurf nor dandruff about them. All aged horses ought to have their mouths examined occasionally, as the edges of the teeth wear sharp and cut the masseter muscle or cheek, and bring on ulceration.

Caries in the jaw is in most of cases incurable. The orifice ought to be left open so that the matter can discharge.

PNEUMONIA, OR LUNG FEVER,

Or inflammation of the lungs, is one of the worst diseases the veterinary surgeon has to contend with, more especially in a changeable climate. It often occurs that the pleura is evolved, a thickening or collection or infusion of serum takes place on the thin membrane or covering of the lung tissue, often the result of contagion, but exposure, or a sudden chill, or neglect after a hard drive is often the cause. The horse will take a chill, shake all over, have cold legs, refuse to feed, a hot mouth, an anxious look, and in ten or twelve hours show labored breathing. Never lose a moment to get the assistance of a veterinary surgeon, if within reach, as moments are precious at that stage. Do not bleed, as used to be the case thirty years ago. Build up and retain all the vitality possible. Do not annoy the horse; keep him quiet, and the veterinary surgeon by auscultation will be able to prescribe either internal remedy or blister, as the case requires. Keep all the pails away from the sick horse but the one used by him; do not give any left hay or other food, the sick refuse, to any other horse. Keep him warm and well blanketed; hand rub his legs to keep them from swelling.

THE THROAT AND ITS DISEASES.

Sore throat in the horse is frequently a sign of some graver disorder, and in all cases should be cautiously treated. It often occurs in young horses taken up from pasture and confined in close stables, breathing the contaminating air of most stables. It is not every measure that will cure sore throat; it frequently occurs that the groom or owner will commence the treatment himself, rubbing turpentine, the infernal fluid of the quack, blistering, burning and scalding skin and hair; and as a last resource turning him out to pasture, there to contract other dis-

eases, even glanders itself, and spread the disease far and wide. There are few internal diseases that the horse is subject to but the throat is involved: laryngitis, distemper, irritation of the mucous membrane of the œsophagus and larynx, which shows a swelling in the neck accompanied with a cough; the osthiod glands, situated at the root of the tongue, become swollen and require treatment peculiar to the case. The writer would particularly call the attention of the reader to the different diseases that cause cough: distemper, laryngitis, bronchitis, pneumonia, irritation of the stomach, bowels, worms and ozena; all the above diseases are the result of cold and exposure. Hot, ill-ventilated stables, dusty oats, musty hay, rank bedding, and a sudden exposure to cold air—these generally provoke a cough, and if care be not taken bring on disease. Cough is more frequently present as a symptom than as a disease.

Distemper, a name given to a swelling accompanied with inflammation of the intermaxillary or space between the under jaw, and accompanied with running at the nose, affects all colts after being taken up from pasture—the consequence of confinement and change of food.

BRONCHITIS

Is a dangerous and painful malady, originally situated on the mucous membrane of the air passages, and, if not arrested, involves the whole contents of the thorax; caused by cold, standing for hours at a time exposed to rain and cold drafts. It is difficult to prescribe for a case of bronchitis without a minute examination of the patient. Some horses are affected with a choking sensation, others again with wheezing; but in every case we have the short cough, and as the disease proceeds, a discharge at the nose takes place—an effort of nature to get clear of the disease.

WORMS.

We feel sorry to admit that such a clean feeding animal as the horse should be the receptacle of internal parasites. They are introduced into the stomach when out at pasture, both in summer and winter; as various carrion or insect feeding birds deposit their droppings among the short grass, moss, foliage of hedges and trees. The horse cropping his feed takes them into his stomach in embryo or larva state, and as soon as developed, he will show a depraved appetite, even eating dried cow dung while at pasture, and his own when in the loose box in the stable. It is no wonder that we see the tucked belly, long coat, and dusty, dry dandruff adhering to the skin. The lumbrecus teres, or large worm, which I have so often found in the large and small intestines—I do not remember of ever having found them in the stomach—are from ten to fifteen inches in length, with the thickness of a pipe stem; when cut up they are full of embryo, they feed principally on the kyle or milky fluid digested from the food before converted into blood by the liver; therefore an animal so infested by numberless quantities of entozoa is robbed of all nutrition and starved; one horse so infected eating as much as would feed two horses, in order to keep skin and bone together. The next in size, the strongylus, from one to two inches, white and black, are found principally in the small intestines and rectum. Birds, such as the starling of Europe, rooks, crows and blackbirds of the States pick them from the droppings of the horse, where they find an element to propagate their species, and drop or deposit in return on the hay, and from thence are carried into the stable, there again to propagate their species anew. Worms sometimes eat through important structures and cause death. Chronic cases of colic are often the result of worms in the small intestines. It is the custom of some practitioners to give a drachm dose of aloes and croton oil to expel the worms, but such treatment is malpractice, and will not expel the worms, as they adhere firmer to the coat of the in-

testines. Next in order is the smallest, called ascarides. They chiefly are found in immense numbers in the rectum. Their presence is known by a black gummy excrescence adhering to the anus. They are more easily got rid off than any other species. Their presence troubles and annoys the horse so that he will rub his tail till not a hair is left. The best solution that will bring away these is to inject a solution of opium, starch and milk till they engorge themselves, and every worm will come away with the discharge. Lumbrice and strangulus are treated thus: Take for an ordinary sized horse one quart of milk, half a pound of black molasses, half an ounce of opium; warm the milk and molasses together, and when cool enough add the opium. The worms will loose their hold of the intestinal wall and revel and feed on the food so palatable, when the narcotic action of the drug will carry them through the intestines. Give every other morning, and the horse's coat will become clear and soft. By repeated feeds of salt mash mixed with boiled turnips and carrots your horse will become fat and free of worms in a short time. This simple and efficacious remedy I recommend to inexperienced parties, but stronger measures can only be used by the experienced practitioner. Purging with drastic medicine is deleterious to the horse and does not do any good, as the worms only adhere firmer to the walls of the intestines.

The tape worm is seldom found in the horse.

ATROPHY, A WASTING OF MUSCLE, OR SWEENY.

Atrophy takes place in any muscle where a defect of circulation has taken place, as the blood in its circulation feeds all the muscles in its onward mission. It is most often seen on the shoulder of the horse, and is in some cases the result of strain in the muscle, a tight collar, or a hard gallop. Whenever the horse is affected he will show lameness by pointing the foot

while standing in the stable, and not being able to flex the knee while walking. A heat will be found before the sinking or shriveling up of the muscle of the shoulder blade. Fomentation by warm decoctions of various herbs, then an active external stimulant, with friction, is the quickest way to relieve the animal of the trametic or cramped condition of the part involved. A blister is not the remedy to cure a defect of circulation, neither is probing and blowing the air into the tissue beneath the skin a mode of good treatment. Soothing is the successful mode, and in every case good active friction.

SHOULDER LAMENESS

Is often caused by slipping or running against any stationary or hard substance, such as a fence, hitching-post, or by a kick. If swelling be the result, take of tincture of arnica, tincture of calendula, equal parts, aqua ammonia two oz., mix and rub on the part three times a day. Keep covered with a cloth or blanket, as the remedy is volatile, in order that the remedy may sink into the skin. Should a fever take place, ten or fifteen drops of tincture of aconite in one tablespoonful of cold water every two hours, till relieved. See that the bowels are kept open, but do not give any purgative, as you only bring on medicinal disease.

ELBOW TUMOR

Is the result of the horse lying down on the heel of his shoe while in his stall. Whenever seen, apply cold fomentations with a strong solution of iodine, and it will be easily removed; but if neglected, an operation with the knife will be the result. In order to prevent the like result, roll the foot up each morning with a cloth, and then no pressure will injure the elbow.

BOG SPAVIN, (ENLARGED BURÆ MUCUS,)**BLOOD SPAVIN, (LOCAL VENOUS CONGESTION,)**

Is the term usually given to enlarged mucous capsules, or to distended state of the subcutaneous veins in the region of the hock. Bog spavin and bone spavin bear no resemblance to each other. I do not remember of seeing a horse lame from bog spavin, but the unsightly appearance of the inside of the hock makes a horse show a defect and weakness of the ligaments that bind the joint. It is a distension or collection of synovia, or joint oil. A cooling lotion and a slight blister are the proper treatment to reduce the swelling. It is not hereditary, like bone spavin.

BONE SPAVIN

Is the growth or excess of bone growth on the bones of the hock till the growth of bone presses against the tendons and interferes with the movement of the leg. Among the diseases the horse is subject to, more torment and suffering have been undergone in the name of treatment than in any other known to the profession. Burning, firing, cutting off the excessive growth of bone with a chisel after throwing, and cutting the skin and ligament, beside blistering like a burning iron, causing the poor animal to undergo a life of suffering every step it takes. The only way to treat a case of bone spavin is to use a soothing remedy by being often rubbed on the inside of the hind leg every night and morning. Mercurial ointments have been in use for ages, but have only ended in making the cure worse than the disease, and leave a blemish for life.

RINGBONE, OR EXOSTOSIS,

Is the same in effect as bone spavin, situated on or in the vicinity of the pastern joint, frequently ending in ankylosis, or a growing firm and immovable of the pastern joint, (called ossified). Ringbone is what is called a "periosteal affection," or a growing of calcareous matter below the thin membrane that covers the bone. Many a brutal operation has the horse been subjected to as a supposed means of cure. One case I call to memory from reading: A poor aged animal that had been the faithful slave of its master for many a year, had been subject to this disease, and the owner had long since given up all hope of a cure, till at length one of those exotic, pestiferous specimens of humanity, termed horse doctors, undertook for the sum of \$5.00 to cure an hereditary, incurable disease. The owner, through the deceptive arguments of the barbarian, consented to an operation, which for cruelty would have outdone an inquisitor. It consisted in cutting through the integuments down to the bones, for both hind legs were operated on; a red-hot iron was then freely used over the exposed surfaces, some oil of turpentine then being poured into the horrid wound, it was set on fire, and thus the brutal operation terminated. Ringbone is incurable. Pain may be alleviated for a time, but hard work of any kind causes pain and suffering to the animal.

SCRATCHES

Are the result of neglect in stable management After a horse has been working in the mud be sure to wash the fetlocks well with warm water and soap, then roll on a bandage till the fetlocks get dried, then rub well with the hand to accelerate the circulation, and scratches or greased heels will be unknown in the horse. When affected with scratches, keep clean as above, and should they proceed from mud or stable filth, if the skin

has become cracked and raw, an application of glycerine with a weak caustic ointment, will cure them in a few days. They are very prevalent in winter, especially in rough or hairy legged horses.

THRUSH

Is a disease caused by neglect, and affects the frog of the foot—is inflammation of the sensitive frog which secretes matter instead of horn. Sand, gravel, or any foreign substance will bring on thrush in its worst form, secreting a fetid matter between the clefts of the frog. The frog shrivels up and causes contraction of the foot. It is mostly found in the hind feet of mares, but the fore feet of the horse, in consequence of standing in unclean bedding, are often subject to that disease, and if not quickly attended to will bring on canker in addition to the above disease. A stuffing of tar is a very objectionable mode of treatment, as the frog will become detached. A poultice of any kind will only aggravate the disease and bring on matter, when the cure becomes worse than the disease. Clean out the frog every time the horse has been used, wash, dry and stuff the cleft of the foot with an astringent ointment.

QUITTER

In the foot is caused by gravel or any foreign substance getting between the hoof and coffin bone, or os pedis, or a prick with a nail, as the result of careless shoeing. The sand gets into the lamina, and causes swelling on the coronary band or upper part of the hoof, which breaks out and secretes a purulent matter which requires active measures to stop, or prevent the spread of the disease over the inside of the hoof. The horse is very lame and often is affected with considerable local fever. The case requires the active treatment of the veterinary surgeon.

CORNS IN HORSES' FEET

Are not at all times the effect of bad shoeing, but in many cases the shoes are kept too long on till they are worn too thin. The hoof growing over the foot and the heel pressing on the sole of the foot, cause a congestion of blood; hence a corn. It sometimes happens that the horse has a stone or pebble firmly imbedded between the heel and the shoe, which remains unknown to the owner till the horse shows lame. Dressing the corn with the draw-knife and easing the shoe of the part, is all that can be done. Every shoeing smith has his own cure, and everyone better than another. A bar shoe is recommended, but I condemn such a shoe. A grass shoe, or a shoe to come half way along the foot, leaving the foot free, is the best mode for the easy treatment of corns.

INFLAMMATION OF THE FEET, OR LAMINITIS,

Is occasioned by various causes, such as standing in cold mud, snow, soft slush, after being driven on hard ground till heated. The fore feet are the seat of the above disease; the lamina or pad between the os pedis or coffin bone, and the hoof or crust. It is the weight bearing pad that assists the strain or concussion, on which all the weight of the horse is subjected. It is first detected by a restlessness, lifting one foot in standing, and pointing, then the other; and if taken up and examined a great heat will be found to have taken place all over the horny part of the feet. The practice with some is to take a chisel and cut a nick out of the sole between the point of the frog and the toe, and bleed, as this part of the foot is a perfect net-work of small blood vessels, which often results in tetanus or lock-jaw, or takes longer to heal up than the scientific treatment of the disease takes; besides, sand or dust getting into the wound

cause a formation of matter, making the cure worse than the disease. A pricked foot and a case of foot founder require similar treatment—neither poultice nor blister, as a poultice, of whatever description, will bring on matter, and to blister is adding fuel to fire. The difficulty with the groom is to know the difference between a case of bruised foot, pricked foot, foot founder, or laminitis. As the treatment of each case differs materially, it would take more space than this edition can allow, and is so apt to mislead. All diseases of the foot, of whatever nature, affect the whole system, and therefore bring on sympathetic fever.

SAND CRACK, OR QUARTER CRACK,

Is caused by neglect and inattention to stable management, traveling on hard pavement in hot weather without shoes, burning the foot while shoeing, whereby they become brittle, too large nails or driving nails too close. See that every horse standing on a boarded stable floor has the feet regularly washed and kept clean, and a good hoof ointment applied to the feet not less than three times a week, at evening after the horse is done for the day.

NAVICULAR DISEASE

Is often mistaken for injury to the heel or wings of the os pedis, being affected by ossification of the elastic cartilages, a great amount of cartilage being predominant in the heel, in order to give elasticity to the foot. A case of navicular disease consists of carious affection of the navicular or small oval-shaped bone of the foot, and is incurable, and more especially if exostosis has taken place.

SYNOVIAL MEMBRANES

Are the membranes that spread the synovia or joint oil over the joints, ligaments, tendons, and cartilage of all movable surfaces of the animal system. When a strain occurs in the ligaments of a joint or a tendon, a profuse supply of this fluid is poured forth to lubricate or soothe the part. When inflammation of a joint has taken place from injury or hard work, this secretion is seriously affected, and should an opening into the joint be the result, then a straw-colored substance is seen to run out of the wound or puncture. A healing plaster made of white pine, beeswax, and mutton tallow, equal parts, is the best and most simple remedy to treat successfully such a case.

STIFLE LAMENESS, OR LUXATION OF PATELLA,

Is caused in various ways, such as a kick, a stroke, a slip or false step, or sudden leap. A horse affected with stifle lameness holds up his leg, and if compelled to move will drag the leg along. Whenever noticed, get the horse into the stable, draw the lame leg up and replace the small bone. Keep quiet for a number of days, only allowing the horse the use of the leg to get laid down at night. Keep well bedded, and feed laxative food. Should the patella bone again slip out of the groove of the femur, a strong linen plaster will be required to keep the bone in place, by being drawn across the joint. A blister will do no good, but only evil, as irritation and unnecessary suffering are the result over and above the acute pain already present.

INFLUENZA, OR DISTEMPER,

Is an epidemic, as in every case the patient has come in contact with the virus, either from drinking from some public trough, or feed box in some strange stable, or of some hitching post.

It is first noticed by the horse refusing to feed, hanging his head and shaking; sometimes a cold sweat pervades the whole skin, hot mouth, etc.

The first thing is to blanket well, rub the legs, although they may not be cold, as in pleuro pneumonia; but as soon as the lungs become affected, then cold legs take place. It is more of a broncho-catarrhal nature, and in the early stages has to be treated as such. I condemn the practice of blood-letting, purging or blistering. I have been successful in all cases, as I keep up all the strength and vitality possible by good nourishing treatment. Never refuse a refreshing drink of cold water with a little oat meal, little at a time but often, more especially if the weather be warm. I have found stimulants to be beneficial at all times, and such remedies as the case required.

Iodide of sulphur, $\frac{1}{2}$ oz.; iodide of potassium, $\frac{1}{2}$ oz.; flour of sulphur, 2 oz.; powdered gentian, 2 oz.; mix and make up into twelve powders; give one in feed each evening.

A LIST OF DISEASES

REQUIRING THE ATTENTION OF A VETERINARY SURGEON.

Sloughing of a muscle, or ulceration,
 Indolent wounds,
 Excessive granulations,
 Stoppage of hemorrhage,
 Incised wounds,
 Lacerated wounds,
 Contused wounds,
 Punctured wounds,
 Poisoned, or gun-shot wounds.
 Abscesses,
 Tetanus, or lockjaw.

The above diseases, if interfered with by a novice with a view to a cure, are often made worse. A poultice has often been applied where a disease was made doubly worse. A blister has

been applied, the budding iron, the caustic nitrate of silver, corrosive sublimate, sulphate of copper, and pain and poison have been a legacy to the poor horse for life. Having given a brief compendium of the diseases of the legs and feet, space will not allow further comment, as the object of the writer is to keep this work as much as possible condensed, but treating all the subjects in a practical manner, so that the groom or owner of the horse will be perfectly able to understand intelligibly the every-day treatment of the horse, giving the experience of a lifetime devoted to veterinary practice.

DIAPHORESIS, OR PLEURODYNIA,

Affects the horse with the same appearance as a case of founder. It is a soreness of the muscles of the chest, and in an autopsy we find the diaphragm congested, with extravasation of blood. A sudden chill after a fast drive, swimming across cold streams, standing in the barn after being heated, are among the causes that bring on this disease. It used to be the practice to apply a strong mustard blister, bleed and give tartar emetic; but those days have gone by, and a different mode of treatment is practiced, as death was often the reward of such brutal work. A mild sweating application, with plenty of warm clothing and a stimulating remedy, will bring the sufferer convalescent in a few days.

SPASMS OF THE DIAPHRAGM

Is often mistaken for colic, as the action of the horse is very much the same, but the auscultation applied by a qualified practitioner, very quickly discerns between the peristaltic action and the flapping sound. This is a very painful and dangerous

disease, as the plunging, rising up, or sudden dropping down, of the animal often causes internal rupture and sudden death. I knew of a case where a would-be horse doctor gave one pint of nitric acid to a horse. Some of the acid dropped on the smith's arm while giving the infernal drench, and burned the skin off every part it touched. I pitied the poor horse, but I arrived in time to antidote the fiery drench and save the horse.

COLIC

Is the worst disease the veterinary surgeon has to contend with, as a careful examination can scarcely be attained while the poor animal is suffering from spasmodic pain and torture. There is only one disease that properly ought to have the name of colic, and that is gastritis or windy colic, caused by fermentation of the contents of the stomach instead of digestion; or more plainly speaking, when the gastric juice is overpowered, an over-loaded stomach causing dyspepsia, will create severe pain and cause the horse equal suffering and have the appearance of colic. Strangulation and rupture cause the horse to show the same symptoms. Introception of the small intestines, constipation, worms, calculi of the bowels, calculi in the bladder; and as above referred to, spasmodic affection of the diaphragm: more horses die of the above diseases than all other ailments put together; and the worst of it is a supposed case of colic and the same remedy applied to cure all. Whenever a horse shows symptoms of pain in the bowels, the ever-ready whisky and pepper is crammed down his throat. Then no good results from it, a veterinary surgeon is sent for, who finds the poor horse on the point of death, inflammation having been set up with more vigor by the whisky; or warm water, sulphuric ether and one ounce of Barbadoes aloes; or the horse doctor's curse, turpentine. Many a good horse is killed by the friendly advice of a

neighbor, who reasons or argues, "my father used to give all his horses so-and-so, and it always did them good." Take an old ignorant wife to the bedside of a sick neighbor, and even before and in the presence of the family physician, she will prescribe a remedy and insist on what should be done. Such is often the case among a number of ignorant stable loafers. Prescriptions and recommendations for the treatment of colic are given at great length in some veterinary works, which, when followed, have been the means of killing thousands of horses. No human being ought to put out his hand to treat disease who knows nothing about it, nor should any encouragement be given to any one who is not qualified to treat disease and to give a prescription for colic. While ten horses may be treated with that prescription, not one case may be a true case of colic. Spasmodic action and flatulency are quite different and require different treatment. Sulphuric ether will bring on disease of a very fatal character. Barbadoes aloes bring on medicinal disease, and many a good horse has been killed—purged to death—by those health-destroying agents of by-gone days. Croton oil, the electric fire of the pharmacy, ought to be discarded forever.

When a horse becomes sick and shows symptoms of colic, keep water away from him till the veterinary surgeon arrives. Take care that he does not injure himself while suffering from spasms: see that he is well bedded and does not chafe himself; this is all that ought to be done till assistance arrives.

ENTERITIS, OR INFLAMMATION OF THE BOWELS.

In cases of internal inflammation much judgment is required. I have been called to a case where inflammation was caused by a large physic ball. A slight case of constipation was the excuse for giving the deadly purgative. In inflammation of any internal organ, no purgative should be given, as there is so

strong a sympathy between the various contents of the cavity of the chest that no one of them can be inflamed to any great extent without all the others being disposed to become so; and therefore a purgative in lung fever is as fatal as a dose of poison, and the excitement produced on the bowels by the purgative no medical skill can stop.

THE PANCREAS,

Or organ of secretion, lies between the stomach and left kidney. Its secreting fluid is carried into the intestines by a duct which enters at the same aperture as the liver. Of late years it has been fully and clearly defined by autopsy that its use to the animal economy is the separation of chyme, and therefore assists digestion.

CHRONIC DIARRHŒA

Weakens the system and renders the animal so affected unfit to perform a reasonable amount of labor. A horse so affected requires a very careful and judicious course of treatment, which should be kept up for a considerable length of time. The best mode of treatment is to take a quantity of flour browned in the oven, feed old oats, or if new, get them dried in a kiln or oven. Should the disease be of an obstinate nature, give tincture of catechu, one drachm, in a little cold water, two times a day before feeding. A tablespoonful of oil meal and middlings, with salt added, a little wet, is a good change of feed so as to keep the bowels regular, with all the hay the horse will eat, and moderate exercise, as fast work will aggravate or keep up the disease. It often occurs that no symptoms are seen in the stall till exertion takes place in driving, then the disagreeable effect appears. No horse that shows relaxation while being driven fast is constitutionally strong or able to keep up his early speed.

The chalk, nitre, vinegar, salts, and drastic medicines are a failure; good old oats, old hay, burned flour and oat-meal, with powdered catechu are the only remedies that keep a horse free from the disease. It sometimes happens that a horse will take purge and to the attendant no reason can be given but a change of water, feeding out hay where colchicum or other bitter weeds have been eaten. A feed of sour middlings or heated oats is the cause in a great many cases, and the sooner a decided stop is put to it the better, as the animal loses more flesh in one day than can be put on in a month's good keep.

THE OMENTUM, OR CAUL,

Is a fatty covering over the bowels. Its principal use is to lubricate and keep the bowels cool by always secreting a fine fluid, in order to keep the organism of the animal structure from abrasion or injury. It contains no blood vesicles, but in cases of enteritis is seriously involved.

NEPHRITIS, OR INFLAMMATION OF THE KIDNEYS,

Is a disease common to the horse; is caused by being overdosed with resin, nitre, and being what is called doped. It is a serious mistake to give a horse a large quantity of resin, as it gums up the renal ducts, and nitre stimulates the kidneys to over-exertion, and brings on weakness and disease that the horse never gets over, and which is never imputed to the bad effects of these diuretics; and should the animal be exposed to a cold drenching rain, inflammation is the result. Musty hay and kiln-dried oats are other aggravations to the kidneys. The function of the kidneys is to separate the urea, the poisonous portion of the urine. Not only are the kidneys excited, weakened and disposed to disease, but the whole frame becomes

debilitated; for the absorbents have carried away a great part of that which was necessary to the health and condition of the horse, in order to supply the sufficiency of the blood occasioned by the inordinate discharge of urine. When the function of the kidneys is destroyed, blood, albumen, calcareous matter and urea are sent indiscriminately into the bladder, and the horse pines away and dies.

DIABETES, OR PROFUSE STALING,

Is not a common disease in the horse, unless over stimulants have been given, and a tampering with some groom's nostrum has been the cause.

CYSTITIS, OR INFLAMMATION OF THE BLADDER,

Is caused by inordinate retention of urine, as some horses will retain their water for a whole day if kept in harness or under the saddle. A horse during the heated season does not emit as much urine as in moderate or temperate weather; that is to say, the perspiration is more free in warm weather than cold. The horse affected with retention of urine is subject to acute suffering, and to an inexperienced eye acts as if suffering from colic, till rupture of the walls or body of the bladder has taken place, when death puts an end to his suffering, while all the time he has been under treatment for a mistaken case of colic. The catheter, in the hands of an experienced practitioner, is the only immediate relief for the horse, but mares can easily be relieved in a few minutes, but are not so subject to this disease as the horse. Inflammation in the neck or muscular part of the bladder is attended with acute and excruciating pain, and is easily known by the amount of mucus of a brown and yellow color, and the great exertion while in the act of staling. The

spasm of the sphincter muscle caused by pressure on the neck of the bladder, acts so powerfully as to cause contraction so severe that the animal under the acute suffering has been known to so injure himself internally as to be of no use afterwards. In a district of country where animals are in the habit of drinking water charged with lime, springs from limestone rock, they are more subject to calculi in the bladder, or gravel; and this is known by a continual attempt to void urine. A two drachm dose of tincture of cantharides and a vegetable diuretic in a drink of cold water, will remove the calculi or gravel, by breaking it down into unadhesive particles, and causing them to be voided in the urine. Should the spasms continue, inject a decoction of slippery elm bark, one pint to half an ounce of tincture of opium, and foment externally with warm water to assist in soothing the part. Lose no time to get your animal relief, as the consequences in all cases are serious.

Cleanliness is the safeguard in a great many cases against these affections, and carelessness on the part of the attendant is often the result. Wash out the horse at least once a month, more especially if bedded with sawdust, as the ordinary accumulation on the point of the penis of what is called a bean, is a decided obstruction in urination, beside the dust or sand adhering to the inside of the sheath get mixed and hardened with the gum matter secreted inside.

HEPATITIS, OR INFLAMMATION OF THE LIVER,

Is known by general external symptoms, as the urea or coloring matter of the bile seen prevailing the cornea of the eye; and in a great many cases a brown color takes place on each side of the tongue, accompanied with heat. It is a very rare occurrence in the horse, as he is not exposed to any of the causes that produce this disease.

Hemorrhage of the liver is more often an affection of the

horse. It is generally fatal. It is more commonly the death of old and worn out horses after severe exertion. Bleeding and purging used to be the treatment of jaundice and all affections of the pancreas and liver, but such treatment has been numbered with the things that were. Calculi of the hepatic duct cause the coloring of the eyes, but require gentle, exciting treatment, as a cure has to be reached by the circulation. All horses affected in an acute form die suddenly, even without the knowledge of the attendants.

HYDROTHORAX,

Or water in the chest, is out of the reach of the ordinary groom or horse attendant to interfere with; therefore as a critical disease I give no advice.

SPLENITIS,

Or inflammation of the spleen, lying between the left side of the stomach and the short ribs. It has been clearly defined by surgical research that the secretion of blood is the office of this organ, and in all cases of acute fever it is seriously involved. In the horse this organ is not so often diseased as in many other of our domestic animals.

THE HEART,

The index of every kind of disturbance of the animal anatomy, indicating every pulsation to every vein and artery, is often the seat of disease caused by over-exertion. For the sake of brevity, I do not intend to enter into an explanation of the various offices of the heart, but simply describe its diseases and their causes. Fatty degeneration is caused by a general wasting of

the system, brought on by neglect after severe exertion, and will often take place very suddenly while in active labor, such as in the hunting field, on the race track, or in heavy drawing; and all such cases often take place in extreme warm weather. If a horse is very fat do not stop him suddenly, but keep him moving gently till cooled off, wash out the mouth often with cold water before leading into the stable. Dropsy, or a collection of fluid in the pericardium, occasionally called pericarditis, gives a different sound in auscultation; therefore, the different resonance or gurgling sound demands a different treatment from either the above-mentioned diseases. Dropsy and inflammation of the heart often take place in the horse at the time of changing his coat,—spring and autumn. An over-fed horse, with little work is often the subject of such a disease. The heavy draught horse of Europe is more the subject of heart disease than any other breed of horses. No horse can be kept in good health that is over-burdened with fat. Apoplexy or fatty degeneration is often the cause of death.

THE SKIN AND ITS DISEASES.

SURFEIT.—Is caused by exposure and sudden chills after the blood has been over-heated, and not by over-feeding, as the name would indicate; but is a disease of the skin breaking out in watery effusions, resembling a round blister. These eruptions are in some cases confined to one part of the horse but they often spread over the whole surface. The disease occurs at the change of coat, spring and autumn. It is an obstruction of some of the pores of the skin, and causes a considerable irritation of the skin; hence the annoyance to the horse while in the stall and when hitched in harness, continually wanting to rub himself. A cooling diuretic remedy is the best as the horse can be used while under treatment. If not attended to, hide-

bound will take place and a disease of the follicles of the hair will be the result, and bare patches will come out all over the animal. Chickens ought never to be allowed to roost in the stable, as the chicken lice get on to the horse and cause great annoyance, besides a deal of trouble and expense.

MANGE is an infectious disease caused by having come in contact with an animal having the disease, or from being in some stall or place where a mangy horse has been. It is first noticed as a pimples poek-like eruption on the skin; it bursts through the cuticle and the hair falls off and leaves a bare spot covered with scurf; the watery fluid oozes from beneath the scab, which falls off and leaves a still wider spot, and a raw greasy sore is left, throwing off scales to propagate or breed the disease in whatever animal it comes in contact with. This is attended with considerable itching, and therefore a torment to the horse. It is first noticed by a falling off of the hair of the the mane, as the mane is the first part generally affected. Its existence may be pretty easily detected even before the blotches appear. Should a horse become diseased where a number of horses are kept, his blanket, harness, brush and currycomb should be kept from the rest of the horses; even the bedding and everything connected with the diseased horse, as this is a contagious disease, and among the whole diseases to which the horse is exposed, there is not one more so than mange. If it once gets into a stable it spreads through it, for the slightest contact is sufficient for the communication.

Every part of the horse ought to be well rubbed over with an ointment composed of oil of tar, flour of sulphur mixed in oil, sweet, neatsfoot, or sperm oil, either will do—and in two days take soft soap and warm water, wash the horse all clean, then apply the ointment again, repeating the washing till the horse is well. And in the meantime give the horse two ounces flour of sulphur, four drachms iodide potassa, ten grains of arsenic, mix and make up into twelve powders; give one each evening

and feed cooling mash, carrots or turnips, and if in the grass season, give cut grass. Be particular in cleaning every part of the stall and harness; wash the blankets well and soak in a strong solution of salt or carbolic acid; burn the brush and combs as soon as the horse gets well.

RECEIPT TO MAKE THE HAIR OF MANE AND TAIL GROW.

As the roots and hair follicles are much stronger and deeper than any other part of the skin, and imbedded in a fatty pulp, they are more liable to permanent disease than any other part. Cleanliness is in a great measure forgotten by horsemen. The hair follicles of the tail, if examined, will be seen to be covered with a scaly, gritty, greasy substance, an effort of nature to get rid of excrescences. A superabundance of that dry, effete substance shows plainly that if not soon removed a falling out of the hair will be the result—tetter, as it is sometimes called; the follicles become diseased and dried up, and are therefore rendered unfit to produce hair. As there is nothing so ornamental or beautiful to a horse as hair, a fine, long, wavy mane and long full tail, I will expect the reader to be not a little interested in the following remarks :

Whenever we are called to see a horse with staring coat and scaly skin, we have no hesitation in stating that disease has taken place and external support is deficient, the circulation impeded. In cases of pneumonia a scurfy, scaly coat takes place. Starvation and exposure to cold, filth and bad grooming cause a disease in the epidermis and follicles. In rat-tailed horses most of the hair is split from the outside and inward, and the skin has become roughened and scaly, resembling that of an elephant, or what is called elephantiasis. Falling out of the hair occurs from weakness, either of the body generally or of the hair bulbs. The proper way is to wash the tail well with soft

soap, a little borax, and warm soft or rain water; rub well across the tail, keeping the left hand under the tail. In the evening, after the horse has got through for the day, rinse well with cold water, then dry; in an hour after take the following preparation and apply: Melt white wax, $\frac{1}{2}$ pound, olive oil, 1 pint, calamine, $\frac{1}{2}$ pound, camphor, 1 ounce, melted in alcohol; melt over a slow fire; when cold add the camphor. Treat the mane in same manner as the tail; rub well in and wash out every morning before being hitched up. Continue the same process every other evening, or as often as possible. The above preparation will supply a pair of horses for six months.

STUART'S REMEDY.

RECEIPT No. 2.—Take 1 lb. spermaceti, $\frac{1}{2}$ lb. white wax, 2 ounces palm oil; melt on a slow fire. When cold add 4 ozs. tincture of calendula, 1 oz. aqua ammonia, $\frac{1}{2}$ oz. carbonate of soda. Mix and stir well, then bottle tight. This preparation is very valuable to cool the tail of a colt, as a heat is sometimes present when they are kept in a loose box and fed oats, corn and hay, and in every case it prevents them from rubbing the tail or mane. Were breeders to pay a little more attention to the above advice they would lay the foundation of having a good tail and mane when they become fit for harness.

RECEIPT No. 3.—1 pint bay rum, 2 pints neats foot oil, 6 ozs. acetate of ammonia, tincture of cantharides, spirits of camphor, $\frac{1}{2}$ oz. This is easily prepared. Mix cold and cork up till wanted. In every case see that the mane and tail are clean and free from grease before use.

Any of the above recipes are applicable for aged horses, especially after the fly season is over, as most carriage horses are in the habit of switching away the hair of their tails. No. 2, if often used, will grow a wavy, long mane and tail, and shine quite clear and bright.

No. 3 is mostly used on white tail and mane, as it will not stain.

There are many other recipes recommended, containing train or whale oil, that will only smear and stain the hair and take a long time to wash off.

VICES, OR DISAGREEABLE HABITS OF THE HORSE.

Restiveness is sometimes hereditary in the horse, as some of the English thoroughbreds will be continually in motion, drawing their halter chain through the ring that the horse is attached to in his stall, running back and forward in the stall, weaving or swinging the head from side to side when not feeding, swallowing their food without grinding, not lying down, pawing all their bedding down and lying on the bare boards. Such horses should be bedded with sawdust or dry sand.

Wind sucking and cribbing is a very disagreeable and dangerous habit. They are worse in a loose box than an open stall. A wire muzzle worn over the nose, made so that a horse can eat hay, is the only preventive. It is no disease, nor is it caused by any unsoundness, as I have made a *post-mortem* of most inveterate cribbers several times in order to ascertain the cause, and see if there was any abnormal condition of the stomach or intes-

tines ; but research on my part and that of all others has failed; and not a writer, German, French or English, has been able to prove by research, that any abnormal condition caused crib-biting, but that it is simply a habit. An opinion prevails among some practitioners that cribbing brings on dyspepsia and indigestion. I have not seen a case where they did not feed and digest their food as well as any other horses, and they are capable of doing their work as well as any other animal. If they leave the stable bloated, a few yards and they are all right; and as for being the subjects of colic more than any other horses I have yet to get proof. My experience in this habit extends over thirty-three years in both hemispheres of the globe.

Biting, kicking, rearing, running away in harness, vicious to clean—these are often the fault of the groom ; as the groom will scratch, tease and tickle the horse while standing, for his own amusement, till he becomes uncontrollable, and then will punish the horse for the very fault he has taught him.

Cleaning the horse in the stall is very bad practice, as the horse will learn to crib as if taught by another horse. Every horse ought to be cleaned on the stable floor, fixed in such a manner as not to have any liberty to get at anything—and in warm weather to be cleaned out of doors.

Stall kicking is another habit which one horse will learn from another, as the horse is one of the most imitative of all our domestic animals. But I have known a mare to kick all night long with the right foot, and when changed to another stable give it up entirely. A very quiet horse will kick in the dark should any object happen to come near him without making some noise.

As a great many vices in the horse are the result of idleness, every horse ought to be exercised every day, however short a time, even in a loose box, as they are apt to get tired of the monotony.

BEDDING OR LITTER.

Cleanliness to the horse is one of the greatest points of attention as regards hygienic treatment, or the every-day management of the horse. After having fed and watered the horse as the first thing in the morning, remove the soiled litter from the stall and sweep the stall clean, and as often as possible wash out the stall with water and a little carbolic acid to destroy the fumes of ammonia which have a very deleterious effect on the eyes of the horse, and are likewise as obnoxious to the horse as a like nuisance is to the human being.

A common practice is to roll the bedding up at the head of the stall immediately below the very nose of the horse, which in a confined stable is very deleterious to health ; besides, the safest place to put the hay is in front of the horse on the ground, as hay seed and dust do not get into the horse's eyes, and is not so liable to accidents as a rack to teach a horse to crib. There ought not to be any other thing at the head of the stall but the metal feed-box.

Let the stall be getting aired out while the groom is cleaning the horse. A good disinfectant or deodorizer is manganese, or Condyl's Fluid, and at the same time cheap ; as of all animals the horse is the most sensitive to bad smells or filth.

CLIPPING.

Clipping the horse in mid-winter finds advocates only with those who advise it for the sake of gain ; but although as a veterinary surgeon I condemn the practice *in toto*, I am tenfold more benefited oftentimes by the injurious effects of clipping than any one engaged in clipping. I have never seen any good result from the practice. It is believed by many that the horse kept for fast work ought to be clipped. If a well bred, fine coated

horse, he requires no clipping. If coarse haired, clip in the early part of October, while the weather is warm, and by December your horse will have a fine, thick, sleek coat by being kept well blanketed, and will require less care and anxiety during January, February and March, when the weather is at its coldest. Your horse will shed his coat in May and look well; will have a thick close coat during the coldest part of the season and be less susceptible to colds and disease than if clipped in December. The December clipped horse does not shed his coat till the summer is half gone, and a great many cases of skin dis-

THE HORSE IN HEALTH.

ease, running at the nose, pneumonia, the result of exposure and cold, beside expense for extra clothing and care, are the result of clipping in winter. In all the remarks on clipping by any author, I do not find one who advocates winter clipping, except those lucratively engaged. It is not many years since clipping was introduced into America, and experience has taught that winter clipping has been followed with bad results in the Northern States and Canada. Many a noble horse that might have lived to crop the grass of the next spring has been laid low and the green sward of summer bloomed over his grave as the result of December clipping. Cavalry horses, all used for fast

work, neither in Canada nor any part of Europe have orders to be clipped. It is argued by some writers that it is impossible to dry a long-haired horse after a drive; absorbing the moisture by rubbing with cloths is almost impossible; the rubber merely passes over the surface, drying up very little of the perspiration, the great proportion of which is held by the inner coating of soft fur-like hair. To this I reply, take a sponge and come over the wet parts with warm water; take the wooden scraper and scrape the horse well, put on the blanket, and the horse is dry in half an hour after being turned into his stall. Then take him out and rub him down, and your horse is all right. It is a mistaken idea that a horse in a state of perspiration is wet next the skin. Spread the hair to one side and you will find the horse dry next the skin. Another argument is that a horse works better after being clipped. No wonder, as a stinging cold is a sharp whip, and he is compelled to keep moving. Another is that they thrive on less food; any reasonable man knows that the more exposure to cold the more food is required to keep up the animal heat. Another is, they are less liable to disease. Shallow arguments, indeed; vessels that will hold no water. I quote a communication from one of our best edited Sunday morning papers, *The Sunday Morning Voice*, December 27th, 1874:

[Communicated.]

CLIPPING HORSES CRUELTY TO ANIMALS.

The following communication has been handed to us by Mr. Wightman, the agent of the Society for Prevention of Cruelty to Animals. It is a statement from one who is eminently competent to judge of the matter under consideration:

"I have been often asked my opinion as regards clipping horses in winter, or rather robbing them of their natural covering, and the protection given them, like all other animals, against the rigor of a severe winter's cold. I would say, first, it is unnatural; second, injurious; and third, cruel.

"It is unnatural, because no artificial covering can supply the place of the hair, which protects the skin from the inclemency of the weather, cold winds, rain or snow storms. If all the good results that we see trumped up in the newspapers or by parties having an interest in the clip-

ping of horses be so beneficial to health and comfort, why not clip all horses turned out to winter pasture (as it is called)? Clip any horse used for business purposes you will find you will have to keep him well blanketed in the stable; as soon as your horse is wanted the blanket is thrown aside, the harness put on, and the horse driven into town and hitched to a post. Put all the blankets you have got on him and you will find you have too few; your horse, which you expect to be so cheerful, will be standing crouched and drawn up in the belly, and unmistakably suffering from cold. It is said a horse works better; yes, when desperation in the shape of a severe cold is stinging the poor animal, he is compelled to run to keep up the natural heat.

"Second, injurious. It will do very well to refer to the practice of clipping in England, which is common among hunting and thoroughbred harness horses, where the climate is moderate and steady; but all along the lake regions, where the climate is so changeable and suddenly severe, it must be injurious to the health and comfort of the horse.

"Third, cruel; because the horse is compelled to over-exert himself while at work; and this has been the means of bringing on pain and suffering as a consequence of robbing him of his coat. The Creator of the universe made all things well, and pronounced them all very good; and the fine sleek coat given to the horse comes under that appellation. It is said they thrive on less food. It is well known, as a law of nature, that the more the animal system is exposed to the cold, the more food is required to keep up the animal heat. It is also said they are stronger. Does the weight of hair on a horse's back weaken him? Will any reasonable man believe such stuff? Never. A heavy coat of hair will cause a horse to sweat profusely while undergoing severe exertion; a long coat keeps up moisture, but whether wet or dry, it affords protection to the skin and a shield of defense; whereas the skin, if bared by clipping, saves the groom much labor; he can dry the horse in half the time and with less exertion than the natural coat requires; but if not done immediately the horse is sure to suffer.

"If his natural coat is left on, he does not require any clothing, is in less danger, and besides, not so much dependent on his groom for instant attention after a hard drive.

"Clipped horses are longer in shedding their coats than others, and present a jaded appearance beside; half the summer is gone before they get rid of the old dead hair and present the healthy look they otherwise would have had if they had not been clipped.

"I am desirous of seeing clipping stopped, and letting well alone."

ORIGIN OF CLIPPING THE HORSE.

Clipping was never intended as a benefit to the health of the horse, but to defraud a purchaser: to make a coarse-haired horse pass for a fine bred. English history states that in the reign of

Henry I., 1121, when the first Arabian horse was imported into England, the object of that monarch was the improvement of that breed by crossing with the coarse-haired English breed, for racing, hunting, and military purposes or fast work. Commissions were sent to the east of Europe and north of Africa to purchase Arabian and Barbary stock for the above purpose, which in time became fully realized. Many devices were resorted to by horse dealers to fraudulently deceive the buyers of horses. Half a century later, Smithfield market was incorporated as a horse market and race course, and I quote from the *Intelligencer*, a newspaper published in 1679, containing as complete a piece of roguery as can be imagined. It says: "A mare mentioned in our last *Intelligencer*, as a lean pyed one, etc., foundered and moonblind, came this day into the market, (Smithfield), so neat and trimmed (clipped), that like a new beauty, all eyes were on her. Her colors were now coal black, with a star snip and one white fore foot. They had rasped, beaten and filed her teeth, that one would have taken her for a colt; and all her defects were so supplied that a sly racer of the west snapped (bought) her up, and designed to do notable feats with her at New Market Heath, but met a very serious disappointment when he found out the deception." By the above we see that the health of the old mare was not the object; it was deception and fraud, and from that alone clipping sprung, but for lucrative purposes the system has been construed into a world of benefits to the poor animal.

Could the poor horse speak in his own behalf, a thousand human tongues would fail to strike deeper to the root of humanity. The practice of clipping, bishoping and clinching, at that time became the resort of horse dealing deception; clipping the hair from the coarse horse, clipping or filing the teeth of the old horses to make them look young.

Chucking or driving a small stone beneath the sound foot if lame on the other foot, so that parties buying horses could not detect the lameness, as the horse could not limp as long as the

stone remained. But a law was enacted that made these frauds a crime, and yet even to this day it is done to a certain extent.

Various schemes have been tried to introduce clipping into the British army, but without success. In 1796, when I. Stockley was veterinary surgeon to the Royal Artillery; and again in 1811, when Wm. Perceval was veterinary surgeon to the Life Guards, several officers drew up a petition and memorialized the Horse Guards for sanction to clip the military horses. They used all the persuasive powers the human mind was capable of, but before the Royal Horse Guards could give any decision, it was referred to the veterinary surgeons of the different regiments for a report, and the reports were ordered up in eight days. The reports were unanimous that clipping was unsafe and injurious to the horses under their charge; and up till the present time clipping has never been allowed in the British Army. Figure a poor horse doing duty for two hours, with the thermometer below zero, with a northeaster blowing, with not a vestige of hair but mane and tail. And I state without fear of contradiction, that fifty per cent. of all such exposed horses would have been in the infirmary within the next two hours. Besides, if clipped horses could have thriven on less food, the veterinary surgeon would have been the first to advocate clipping; and the commissary department would have quickly availed itself of the opportunity as a point of economy. And from what we are taught by the clipping theory, one would be led to believe a horse could live and thrive on three straws a day. I have never found a man that advocated horse-clipping as a benefit but with the same breath admitted its evils. It is not every horse kept for fast work whose constitution will bear clipping; besides, some horses have more sensitive skins than others. I can refer to cases in Scotland and England where the horse did not live forty-eight hours after being clipped. It is now two hundred years since clipping was introduced with no good result to recommend it, and on that account has made no progress.

AN APPEAL TO HORSE OWNERS.

GRATEFUL HUMANITY, AS A REWARD FOR SERVICES RENDERED
BY THE HORSE.

Any gentleman who has had a horse in his service for a number of years, should recognize the fact that he ought to be better cared for in old age, when he has become infirm and unfit for service, and his gay, gallant carriage of head has become drooping, his skin has lost its glossy color, his joints have become stiff, and natural decay has taken place. John, the hired man, gets a visit of the master in the stable once in a month or so; a proposition is made by John that old Charlie is fairly played out, and he cannot eat his oats; never thinking that the good old faithful servant of fifteen or twenty years service in the family, is out of condition in consequence of being fed on oats and hay from January to January, without even a mash to assist nature. "Well, John, what's to be done?" The answer is ready: "O, sell him." And without thought, the owner gives consent, and off John goes to a sale stable to sell the poor old horse. The horse being sold, John returns with a few dollars, hands them to his master, which is all right. A few days after you are driving down town, and as you try to get out at your fine painted street gate, an obstruction is in the way: a man is unmercifully lashing a poor muddy looking horse, heavily loaded with scrap iron, having traveled many a mile before you were out of bed, in mud and rain. That poor horse wants to get in at that fine gate as in days of yore. You recognize poor Charlie, and your good Christian heart is touched, your conscience revolts, and you call out, "Be kind to that horse, I owned him for a number of years," and you know the answer you would get while every stripe on his poor bare ribs are monuments of disgrace to your honor. Compare Charlie to-day with fifteen years ago, when he was one of a team of beauties that so gayly and gracefully brought you and your

beautiful bride from church, taking you to your place of business day after day, and driving out the family for an evening ride, ever ready, kind children frolicking among his feet and running around his legs at play in the stable, and kind old Charlie would not lift a foot to injure one. Your wife has driven him for pleasure, and baby has prattled among his feet; and Charlie, you petted and gave him an apple or a little sugar, and all to please baby; but you have forgot those days, and poor Charlie—where is he now? Badly housed, poorly fed, an old, hard, ill-fitting harness, an old wagon, heavy loads, and a cruel tyrant for a master: a poor reward for a lifetime servitude.

“And death the poor beast’s dearest friend,
The kindest and the best.”

The few dollars you received only gnawed your conscience after seeing your poor old faithful servant in great distress. Better far get him killed and honorably buried out of sight. If such a practice were carried out, how few poor old worn-out horses would be seen as monuments of disgrace in our streets.

INDEX.

	PAGE		PAGE
Breeding Colts for Pleasure or Profit, for Road or Draught Purposes.....	5	Quittor	37
Signs of Pregnancy.....	7	Corns in Horses' Feet.....	38
Breaking Colts.....	9	Inflammation of the Feet, or Laminitis	38
Buying a Horse—Examination of a Horse	13	Sand Crack, or Quarter Crack..	39
Feeding the Horse during winter	14	Synovial Membranes.....	40
Feeding Horses during summer	15	Stifle Lameness, or Luxation of Patella.....	40
The Detection of Disease.....	16	Influenza, or Distemper.....	40
Fever.....	17	A List of Diseases requiring the attention of a Veterinary Surgeon	41
Disease in the Horse.....	17	Diaphoresis, or Pleurodynia....	42
Poll Evil.....	18	Spasms of the Diaphragm.....	42
Canker in the Ear.....	19	Colic	43
Staggers	19	Enteritis, or Inflammation of the Bowels.....	44
Sunstroke.....	21	The Pancreas	45
The Nasal Organs or Nostrils...	22	Chronic Diarrhoea.....	45
Disease of the Eye.....	22	The Omentum, or Caul.....	45
The Mouth.....	23	Nephritis, or Inflammation of the Kidneys	46
Aptha in the Mouth	24	Diabetes, or Profuse Staling....	47
Lampas in the Colt.....	25	Cystitis, or Inflammation of the Bladder.....	47
Excoriated Angles of the Mouth	26	Hepatitis, or Inflammation of the Liver	48
Speeding Cutting.....	27	Hydrothorax.....	49
The Teeth.....	28	Splenitis	49
Pneumonia or Lung Fever....	30	The Heart	49
The Throat and its Diseases....	30	The Skin and its Diseases.....	50
Bronchitis	31	Receipt to make the Hair of Mane and Tail Grow.....	52
Worms	32	Vices, or Disagreeable Habits of the Horse.....	54
Atrophy, a Wasting of Muscle or Sweeny	33	Bedding, or Litter.....	56
Shoulder Lameness.....	34	Clipping	56
Elbow Tumor.....	34	Clipping Horses Cruelly to Animals.....	58
Bog Spavin, (or enlarged Burcea Mucus)	35	Origin of Clipping the Horse...	59
Blood Spavin (or Local Venous Congestion).....	35	An Appeal to Horse Owners....	61
Bone Spavin	35		
Ringbone or Exostosis.....	36		
Scratches	36		
Thrush	37

LIBRARY OF CONGRESS

0 002 844 697 4